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Book of Berries

3 1964

W. F. ALLEN CO.

Salisbury, Maryland 21801



SPARKLE

Late-Productive

SUPERFECTION

Our Leading Everbearer



W. F. ALLEN CO.

SALISBURY, MARYLAND

80 YEARS OF SERVICE

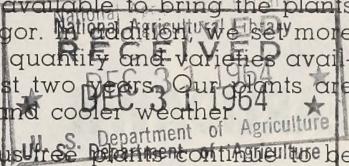


EARLIDAWN

Earliest of All

THE PLANT SITUATION-1965

Supplies of most varieties will be ample this year. Despite a very dry July and August enough of our acreage had irrigation available to bring the plants into the fall period of runner production in good vigor. In addition we set more plants last spring in order to prevent not having the quantity and varieties available as has been the case so frequently in the past two years. Our plants are developing beautifully with fall rains, fertilization and cooler weather.



Registered Plants: As always, "registered" virus-free plants continue to be the most important factor in achieving consistently good results. All of the varieties we are offering are grown from virus-free stocks except Ambrosia, Temple and Dixieland. Growers of "registered" virus-free plants must follow strict requirements as to indexed foundation stocks, isolation during the growing period, soil fumigation and dust applications. These regulations, as detailed on page 3, are administered by the Inspection Service of the State and are the basis of labeling and selling "registered" virus-free plants. We hope that you buy your "registered" virus-free plants from us, but if not be sure you get your planting stock from a grower who meets the requirements for labeling his plants "registered."

Variety Comments: Catskill continues as our sales' leader. Surecrop is moving up each year. We have never had enough foundation stock to grow sufficient Earlidawn to meet the demand for this variety since its introduction in 1956. Earlidawn increases in popularity each year. Pocahontas seems to be slipping, probably because it is getting so difficult to grow. We do not yet know what this growth problem with Pocahontas is. Our best stock of Dixieland from the standpoint of freedom from yellows is not virus free. (See discussion on page 7.)

Order Early: This is most important so that you will get the varieties you want reserved for you and dug while thoroughly dormant. In addition, we at W. F. Allen Co. may plan our work to serve you best.

**ALLEN'S PLANTS, Standard of the Industry for 80 years,
are still your Best Buy for Big Crops of Better Berries.**



PICKING THE WINNERS

A Bird's-eye View of the Best!

Early

EARLIDAWN

Earliest of all. Productive. Very frost-resistant. Berries attractive, light in color and firm enough to ship. Wide adaptability from upper south to far north.

MIDLAND

Very early. Excellent fresh or frozen. Beauty, size, color, quality, productiveness and firmness to put it at the top. **REDGLOW:** Red stele resistant. Beautiful, shiny red berries of excellent quality, ripening with the earliest.

FAIRFAX

The top quality berry. Ideal for home garden, roadside market and where the variety is known by name. Berries are large, firm, becoming dark when fully ripe. Adapted from north to middle south.

Midseason

CATSKILL

Our leading variety. Adapted from Canada south to Missouri and North Carolina. Heaviest producer of any leading variety with more big berries. Good quality and attractive. It is always safe.

SURECROP

Exceptional vigor. Ease of growing and triple resistance to red stele make Surecrop a sure thing.

POCAHONTAS

Productive. Very popular with commercial growers. Excellent shipper. Berries are light, large, attractive and firm.

MIDWAY

Very popular in Michigan. Excellent reports from other areas. Productive. Large size, good quality. Increasing in popularity.

Late

SPARKLE

Unquestionably the best quality and quantity producer for the north. Berries are of medium size, excellent quality, red clear through and many of them. Excellent for freezing. Red stele resistant.

TENN. BEAUTY

Still the best of the late varieties for the middle states. Excellent for home gardens. Beautiful berries with a showy cap. None better for freezing. Quite productive and with irrigation size will hold up.

JERSEYBELLE

Fancy berries that always bring the top price. Large size. Easy to grow with virus-free stocks.

Very Late

VESPER

Large size. Highly productive. Extends the season with beautiful berries. Good for home garden and roadside market.

REDSTAR

The best real late berry and the latest real good berry. Fancy berries for the high price after the others are gone.

Everbearing

SUPERFECTION

Still our first choice of the everbearers. With ample moisture it is easy to grow and quite productive.

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U. S. Department of Agriculture

ALLEN'S WINNING PLANTS

Standard of the Industry for 80 Years

REGISTERED

Growing strawberries for best results with your own efforts is off to a good start by using Allen's Winning Plants. These are registered and are grown under the following rigid schedule. As a berry grower you cannot afford to do all of these things but you should insist that your plant grower does them for you. You can realize most of the benefits from this program by renewing your planting stock every year or two.

Here are the things we must do to qualify for the registered label which means so much to you as a grower:

1. Planting stocks from virus-free sources must be used.
2. Virus-free stock must be kept virus free. This requires 12 to 14 dustings to kill the aphis which is the carrier of the virus organism.
3. This superior stock must be grown in fields isolated from varieties where virus-free plants are not yet available and from other fields of ordinary plants in the community.
4. Provide a screen house from which constantly a basic stock of indexed virus-free plants may come.
5. Soil fumigation to control or eliminate root nematodes. Nemagon is the material used, as that has been found to be the most effective fumigant to date for nematode control. Our plant fields are all fumigated twice during the growing season.
6. The use of abundant plant food. We use about 1800 pounds per acre to keep them growing at their best.
7. A minor element mixture is added to the fertilizer to avoid the possibility of any weakness resulting from any minor element deficiency.
8. Aldrin is added to the fertilizer to kill ants, cutworms, grubworms, etc., which might kill or weaken the plants.
9. Constant inspection to make sure that planting stock is free from red stele and that the soil in which they are to be planted is also clean.
10. With ALLEN'S PLANTS you get all the above plus the benefit of our specialization and experience. We grow no other nursery product and we have been growing and shipping fine strawberry plants for 80 years. We believe this means much to you as a grower.

Sunflower Co., Miss., Jan. 14, 1964. "Thank you for the great work which you have done with strawberries. We have used your plants for more than thirty years and have always found them to be excellent." Mrs. H. S. Stansel.



Making MONEY with STRAWBERRIES

Strawberries can be grown consistently with as high a monetary return for the investment as any crop there is. You must grow good berries which will pay for the extra effort used in producing them. The price of strawberries is dependent upon quality, and quality makes it easy to sell your berries at a nice profit. Here are some things to consider:

1. Strawberries can be grown anywhere; fine varieties suitable for any state are available, with new selections being released often.
2. Strawberries are an excellent way to utilize good land because a high income per acre can be expected. This is especially true near urban areas where good land is limited.
3. Strawberries have a wide variety of markets available—local stores, chain stores, restaurants, processors, commission houses, roadside markets and "Pick Your Own" projects.
4. Strawberries require very little machinery with little capital investment required.
5. Strawberries are the first crop of the season, and bear sooner than any other fruit crop.
6. Strawberries under irrigation are protected in the spring from blossom damage from frost or freezing and the berries produced are larger and better with ample moisture.
7. Strawberries are excellent as a family business or a commercial venture. The work required is suitable for older people, children and women who enjoy working outside.
8. Strawberries appeal to everybody. No one can resist them when quality berries are offered either at retail or wholesale.

Here are some things to watch out for:
1. Do not try to grow more strawberries than you can take care of. The profit in growing strawberries is in growing them well.
2. Do all the things necessary to grow good berries. Inferior berries will sell only when quality berries are not available.

"PICK YOUR OWN"

As we have said for several years, the "Pick Your Own" projects are increasing every year. Fields will vary from less than an acre to more than 20 acres, with the owner-grower

having his crop picked by his customers. Packages are in most cases supplied by the grower so the harvesting operation consists of supervising the customer-pickers and collecting the money for the fruit. Any location within a few miles of a population center is a natural for this type of berry growing.

A person living in the city is able through "Pick Your Own" to get a supply of completely fresh strawberries for his own use with an outing that is both work and fun.

In most cases "Pick Your Own" has the unique situation of providing an ever-increasing market, as satisfied customers tell their friends and, like gossip, more and more people find out. Usually "Pick Your Owners" have a regular mailing list by which they let customers of past years know what variety will be available and when. A small ad in the newspaper, a spot announcement on the local radio station, or other means of publicity may be necessary to bring customers for the first time. After your reputation for good berries is established they will be back. Here is an article from the Morris County (N.J.) Daily Record of March 19, 1964, which Mr. W. R. Muschett sent us: "Pick Your Own Strawberries have come to the Borough. A new hobby, to be tried for the first time, will be started on June 6 when the first berries ripen. W. R. Muschett has been planting berries for the past six years, and has finally selected the Catskill variety, king of all strawberries in the north, a virus-free registered plant from Maryland. The plants bloom in May and picking should last 4 weeks in June. Appointments may be arranged for picking dates. So when you plan that strawberry shortcake for dessert, pick your own."

New Haven Co., Conn., April, 1964: "I received 500 Midland plants three years ago. They were out of this world. I am a retired man, age 52, and this gardening deal is a real hobby, as well as a paying one. I sell 500 quarts each year at 50¢ per quart." Emil Lersh.

Dent Co., Mo., March 9, 1964. "The Pocahontas berries were the most beautiful we ever raised. We picked over 1200 quarts from 1,000 plants and got top market price for every quart from A and P Stores." John A. Dill.

Madison Co., N.Y., Jan. 30, 1964. "Next June will be fifty years I have been growing berries for market. Have a roadside stand and supply many stores in the vicinity. Have purchased plants from you for many years and always received good plants and good count. Please accept order for 5,000 Earlidawn for this spring." Harry L. Gaines.



EARLIDAWN *Earliest of All*

Earlidawn is a cross of Midland and Tennessee Shipper, originally released in 1946 and we have never yet caught up to having sufficient virus-free plants available to satisfy the demand for this fine variety. Earlidawn berries are large in size and maintain this average size throughout the picking season. They are glossy and vivid red in color. (See color picture inside front cover.) The skin is moderately tough with about the same degree of firmness as Pocahontas, not as firm as Blakemore and Dixieland but firmer than Catskill and Sparkle. Earlidawn berries are uniform, with seeds slightly sunken and a flavor that is tart and good.

Earlidawn is the earliest of any variety to ripen and because of the fact that its flower stems are short and the bloom protected by leaves, it is as frost-proof as any variety we know.

The plants are vigorous but do not produce runners as freely as most varieties under adverse growing conditions. Leaf spot, leaf scorch and yellow variegation have not posed any problems with this variety.

WHY IS EARLIDAWN SO POPULAR?

Earlidawn is adaptable. We have excellent reports on Earlidawn from the upper south through the middle states into the far north.

Earlidawn is the earliest ripening variety, ripening 3 to 8 days earlier than any other standard variety.

Earlidawn is firm and definitely able to carry to market in good shape.

Earlidawn is a good berry for freezing. True, the flavor is somewhat tart, but more Earlidawn berries are being frozen each year.

Earlidawn is frost resistant. Every year more reports indicate that Earlidawn is very frost resistant if not frost proof.

Earlidawn is a heavy producer. Most areas report yields of better than 8,000 quarts per acre under tests.

WHAT IS WRONG WITH EARLIDAWN?

Earlidawn is very susceptible to verticillium wilt. Where verticillium wilt is a specific problem Earlidawn should not be planted.

Earlidawn is for the good grower. With good growing conditions and adequate moisture Earlidawn is a vigorous producer of runners, but under poor growing conditions Earlidawn is one of the first to suffer.

We have a nice supply of beautiful Earlidawn plants. Price list page 28.



MIDLAND

With Irrigation it has Everything

Midland has most of the attributes of a great variety—beauty, size, color, quality, productiveness, firmness and freezing excellence. As the name should suggest, Midland is best adapted to the middle states. You can go north if irrigation is available to combat frosts, and you can go a little south if irrigation is available to help get a good fruiting row.

Midland berries are very early, ripening at the same time as Premier and Blakemore and slightly after Earlidawn. They have a bright red color which extends clear through the berry. The berries are quite firm and average large in size. When the berries are first picked they are bright red but they will darken somewhat on holding. For fruit-stands, local trade, home gardens and "Pick Your Own" projects this is not serious but it definitely is a handicap for the wholesale markets. The berries are excellent in quality and all freezing tests have rated it as one of the best.

Midland plants are large, healthy and very productive. However, good soil, plus good care, are necessary to get plenty of plants for a good fruiting row. Midland has two serious weaknesses: it does not always make plants freely and is susceptible to frost. Irrigation can combat both of these difficulties.

We have a good supply of beautiful Midland plants. Price list page 28.

REDGLOW

Redglow, a cross of Fairland and Tennessee Shipper, was introduced by the U.S.D.A. in 1956. The berries are beautiful, shiny red, and are so attractive that the name Redglow suits it very well (see color picture opposite page 14). There are few varieties that can excel it in beauty and quality.

Redglow ripens at the same time as Midland, only a day or two after Earlidawn. Both its earliness and exceptional beauty bring the top dollar for this fine variety.

Plant growth and runner production under most conditions are quite good. It is resistant to the most common strain of red stele, the same as Sparkle. Redglow berries are firm enough to carry to market in good condition and the quality will always bring buyers back.

Redglow is adapted to the middle states and is suggested for trial in the latitudes between Virginia and New York. Berries are rated very good for freezing.

This is an excellent variety with which to start the berry season. Price list page 28.

DIXIELAND Firm and Beautiful

Dixieland is a cross of Midland by Tennessee Shipper with a wide climatic adaptability that extends from Canada to Mexico. Dixieland berries are quite tart, light in color, very firm, big and beautiful. (See color picture facing page 14.) They are very popular for shipping and processing and will hold on the vines the best of any variety in our experience.

Customarily Dixieland makes luxuriant plant growth of exceptional vigor. However, Dixieland is in trouble. A genetic variegation has developed in the variety known as "Spring Yellows" or "June Yellows". Leaf variegation is a non-infectious disease caused by a defect in the hereditary background of the variety, and it is not a virus. There are no known sources of Dixieland free of yellows. Symptoms of yellows appear as the green of new leaves becomes pale and streaked with yellow in the spring. This may disappear during warm weather and show up again in the fall or the next spring. This varies with the season. Plants become stunted and weak, and badly affected plants are unproductive and die prematurely. Plants affected never recover and the variegation is passed on to the runner plants.

We know of no cure for yellows. For two years we have cautioned our customers regarding this problem. During this time we have tested and rogued all of the best stock we could locate from Kentucky, North Carolina, Delaware and Maryland. We feel now that we can definitely state that we have as good a planting stock of Dixieland as can be bought, and certainly better than most. This stock is neither free from yellows nor is it virus free. We do feel for the grower who wants Dixieland, and there is no logical substitute for it, that our stock is the best bet. We do not wish to make any guarantee as to the performance of Dixieland but our experience has been that with roguing and maintaining only one-year fruit beds this variety is still the best choice for an early shipping berry in the south. Price list page 28.

Washington Co., Indiana, Feb. 6, 1964. "Having used your berry stock for several years, I am still going to hold Dixieland as the best among many and I have tried many varieties. They have everything a berry needs, except this yellow infection and we cannot help this; it hasn't hurt me too bad and I am willing to take a chance. In the spring of 1962 I picked a large patch from your stock of plants; the berries were large. The weather became dry and it looked like the crop was over, but suddenly it rained and such a crop I never saw—the berries were larger than ever. This past year we had a very late freeze which ruined two sets of bloom and I still picked a tremendous crop. Do all you can to save Dixieland." Dwayne Morris.

FAIRFAX The Finest Garden Berry

Fairfax is always at the top when varieties are listed for quality. The berries average large in size, many of the first berries being fan shaped, with later ones round and sometimes quite pointed. The berries are firm and have a bright red color when they first ripen. They darken on holding which is not favored on wholesale markets. Fairfax berries should be picked closely, especially in commercial settings. If picking is neglected the bright red berries mixed with the dark berries which have been ripe for several days present a mottled appearance. The size, beauty and quality of Fairfax make it an outstanding berry for retail markets where quality as well as appearance is considered.

Fairfax ripens early in the southern and middle states but becomes midseason or later when it is grown as far north as New York State. Fairfax is well adapted from Virginia northward and is a moderately heavy producer under good conditions. Every garden should include this delicious treat. Price list page 28.



FLORIDA 90

Florida 90 was originated by Dr. A. N. Brooks in Florida in 1947. Florida 90 grows very freely, making as many or more runner plants than any other variety. It is quite subject to leaf spot and leaf scorch and we use copper in our dusting schedule to combat this problem.

The berries are large, pointed, red all the way through and ship very well to northern markets. We believe it is safe to make the statement that it is the standard variety grown in the State of Florida with just a little migration into immediately adjacent territories.

Nearly all other varieties of strawberries will not grow in Florida because there is not sufficient cold weather to produce dormancy which is necessary for fruit development. Florida 90 is the only variety that we can recommend for the home garden in Florida. Price list page 28.

MISSIONARY

Missionary was the leading variety in Florida for many years but has been largely replaced by Florida 90 in most areas. Missionary will do well on almost all soils and better than most on extremely light soils. The berries ripen early, are medium in size, dark red in color, rather tart in quality and attractive in appearance. It is a very good shipper, and is also a favorite with the cold pack or "juice men." Like Florida 90, Missionary is adapted to the climate of Florida and adjacent areas and will produce fruit even in the absence of cold weather. Virus free stocks emphasize the good qualities of Missionary. Price list page 28.

PREMIER

The Frost Proof Berry

Premier originated in Massachusetts and was introduced in 1918. Its adaptability extended from the mountains of North Carolina and Tennessee north to Canada. For years Premier was our sales' leader and is still a favorite with some growers. For the most part better varieties have replaced it.

Premier berries are early, medium size, long-conic, and of fair quality. The plants are resistant to leaf spot, leaf scorch and are tolerant of virus. Premier is hardy and frost proof, giving big crops every year.

Virus free stocks insure a good fruiting row now, but virus free Premier in our opinion is not the real Premier. The fruit is the same in size and shape but it is light in color, less firm and less desirable in quality than the old stock.

For those people who have known and grown Premier we have beautiful plants of virus free Premier and a few plants of the regular stock for those who want to try the old strain. Premier is also sold as Howard 17, which was the original name. Price list page 28.

BLAKEMORE

The Great Southern Shipping and Processing Berry

Blakemore is still a standard shipping berry throughout the southern and middle states. The plants are very vigorous, making a satisfactory row under almost all conditions. Usually it is necessary to thin some plants to keep the bed from getting too thick. Blakemore territory includes all the southern states and goes as far north as southern Pennsylvania and New Jersey.

Blakemore berries are attractive in appearance, light in color and hold the light color for several days. Berries are very firm and will remain in good condition from the time the berries are first picked until they reach market. The berries ripen evenly all over and will stay firm on the vines, making good picking rather easy. In quality they are quite tart and need sugar when consumed as fresh fruit. Some of the berries are large in size but with thick beds and a dry season Blakemore will run down in size very badly unless irrigated. Blakemore is quite productive, giving a high yield per acre, particularly if some thinning of plants has been done.

Blakemore in the right situation is still a money maker. It is easy to grow with our beautiful plants of virus free stock. Price list page 28.

MIDWAY-Midseason-Middle States

Midway, a cross of Dixieland and Temple, has become one of the more popular midseason varieties since its introduction by the U.S.D.A. in 1960. The berries will average medium to large in size and maintain the good size throughout the picking season. In appearance Midway berries are a uniform deep red color (see color picture center of catalog) with a glossy surface and yellow seeds. Berries are firm, with an irregular to blunt conic shape and of good dessert quality.

Midway plant growth is robust and healthy and the plants are extremely productive. Midway is satisfactory for freezing and the resistance of Midway to the common strain of red stele will increase its effectiveness in sections where this is a problem.

Letters from our customers indicate great enthusiasm for Midway, particularly in Michigan. Indications are that Midway's best area of adaptability is on heavier soils or under irrigation on lighter soils from the middle states west to Indiana. Our Midway plants are beautiful. Try some. Price list page 28.

Vigo Co., Indiana, Feb. 6, 1964. "We bought 50 Midway strawberry plants from you in the spring of 1962. Last year (1963) was the first picking of those berries. We kept a record of every quart we picked and were very happy and surprised when we added up our record of 174 quarts. We had never raised strawberries before. We only have a back yard garden. Many of our friends wanted the name of our strawberries, where we bought our plants, etc. Our minister and doctor both said they were the best tasting strawberries they had ever eaten. Our doctor said we should have entered them in a contest instead of giving them away. We froze many for our own use, sold some and gave some to friends. We do hope we can get more Midway plants." Louis Kopp.

EMPIRE

A Large, Productive, High Quality Berry for the North

Empire is one of the fine varieties from the New York State Experiment Station that has done well in most of the northern states from the Atlantic to the Mississippi. The berries are large, bright and attractive (see color picture center of catalog), of better quality but about the same firmness as Premier. Empire berries are not considered good for freezing and the lack of firmness means that they should be handled quickly, kept picked closely and should not be grown too far south. With the right climate Empire will show its characteristic strong vigorous growth and will produce light attractive berries of good size that are easy to market profitably.

We have an adequate supply of plants of this variety. Price list page 28.



SURECROP For Sure Crops

Surecrop is widely adapted from the upper south through the middle states and into the far north. It is one of our relatively new varieties and its popularity has been growing by leaps and bounds. Among the reasons for the rapid rise of Surecrop to one of our sales leaders are the following: The plants are extremely vigorous, producing runners very freely and have bluff, healthy foliage which functions well through the berry season. The plants are quite productive, ranking very high in total yield in almost all tests that have been made. As Mrs. D. D. Swickard of Jefferson Co., Ohio, wrote us on June 2, 1964: "For production and quality I like the Surecrop. They produced when others failed and the size, quality, flavor are excellent. We have plants that were not plowed under (third year crop) and they are producing almost as good as the first and second year."

Surecrop berries are large, fairly round and shiny red. (See color picture inside back cover.) They are very good in quality, firm enough to ship and the size of the berries holds up well. Surecrop is suitable for freezing and some of our customers think that it is one of the best for freezing.

Surecrop is one of the best varieties that has resistance to red stele and is the best variety that has triple resistance to this disease. In any berry field Surecrop will be outstanding because of the vigor of plant growth and the healthy, hardy foliage. Surecrop is well worth growing for its own merits and enables those who have red stele in their soils to stay in the business of raising fancy quality berries. We consider Surecrop to be one of the great midseason berries.

We have an excellent supply of beautiful Surecrop plants. Price list page 28.

Shenandoah Co., Virginia, Feb. 11, 1964. "From the 1,000 Surecrop plants I bought from you in 1962 not one died. As soon as they arrived I put them in a refrigerator, for the ground was too wet to plant them at once. When we picked our first crop in 1963 the patch yielded 1,635 quarts and I think if it had not been so dry we could have picked more. This season I would like to buy 10,000 Surecrop." David Sanders.





POCAHONTAS

Production and Popularity

Pocahontas continues as the most popular midseason shipping berry in many areas. In the last couple of years the growth and vigor of Pocahontas has been slipping somewhat it seems to us. However, some of the new stocks from the breeding program are going to correct this situation we hope.

Pocahontas is adapted to every section with the exception of the deep south and the far west.

POCAHONTAS' POWERFUL POINTS

1. Wide adaptability to climate and soil.
2. Productivity equalling Catskill, Sparkle and other great producers.
3. Large average size of berries, together with the bright red attractive color and showiness. (See color picture center of catalog.)
4. Its pre-eminence as a variety to set in late summer (where plants are available) for a partial crop the following spring.
5. Berries are of good dessert quality (somewhat tart) and considered excellent for freezing.
6. Firmness to make an excellent shipper.

We have a nice supply of very fine Pocahontas plants. Price list page 28.

Sullivan Co., Tenn., April 17, 1964. "In 1961 we had 960 plants, half Catskill and half Pocahontas. We picked 1,720 quarts from these plants. Everybody thought this was outstanding. We sure were pleased—didn't lose one plant." A. D. Morrell.

ERIE

Erie is a cross of Sparkle and Premier introduced by the New York State Experiment Station at Geneva. With virus free plants of this variety you are sure of plenty of plants for a good fruiting row. Erie makes strong, vigorous plants with deep green foliage. Fruit color is medium red, bright and attractive. Erie is fair in quality with a moderately tough skin. Erie ripens fairly late, along with Sparkle. Our supply of Erie plants this year is limited. Price list page 28.

VERMILION

Vermilion berries are large in size, irregular in shape and the fruiting habit is close to the ground causing a tendency to green sides. The skin is bright red with yellow seeds and pale flesh. It ripens midseason in most areas.

Vermilion was originated in Illinois. It is quite productive and the plants are resistant to leaf spot, leaf scorch and the common strain of red stele. Growth is strong and upstanding with an adequate number of big strong plants. Vermilion has shown great productivity in the central states of Ohio, Indiana and Illinois and is certainly worthy of trial in that area. Price list page 28.



TEMPLE

Temple berries are large, regular with a blunt conic shape and moderately firm. Their color is medium red and they are of good dessert quality with an excellent flavor. Temple plants are highly tolerant of virus diseases, resistant to leaf spot, and it was developed as a commercial variety for use on red stele infected soils. It is resistant to the most common strain of red stele and was the first of the good red stele resistant varieties. Price list page 28.

STELEMMASTER

Stelemaster is a fine early variety in addition to its resistance to all three forms of the red stele disease. It is a vigorous grower and quite productive. The berries are of a good average size, coming about the same time as Blakemore. They are medium red, glossy and generally uniform and smooth. The flesh is light red, firm, juicy, with a slightly tart flavor. It is not recommended for freezing.

If you have red stele in your soil it will pay you to remember Stelemaster. Price list page 28.

SENATOR DUNLAP

Dunlap is a fine old variety that was found in Illinois in 1890. It is grown principally in Illinois, Wisconsin, Iowa, Minnesota, Nebraska, North Dakota and South Dakota.

Dunlap berries are medium size and not too firm. They are very good as fresh fruit and rated as average for processing. The berries are a bright, rich red clear through.

Dunlap plants are vigorous growers but quite susceptible to leaf spot. We use copper in our dusting schedule to combat this problem. We have a nice supply of beautiful Dunlap plants this season. Price list page 28.



ROBINSON

*A Money Maker
for Northern Growers*

Robinson is primarily a berry for the north. The fruit in the southern and even lower middle states is not firm enough for shipping and not as good in quality as that grown in the north. There have been good reports on Robinson from nearly all the northern states with some enthusiastic supporters as far south as Missouri and northern Virginia.

Robinson berries are usually rather soft and not considered very high in quality, although

there are many who do not agree with this and feel that Robinson quality is good. In this section of Maryland Robinson has been quite profitable in dry years but in wet years it is so soft that even with close picking there is considerable loss of fruit.

The plant growth of Robinson is nearly always good. It seldom fails to make a good fruiting row even under adverse conditions. The plants individually are small but they do bear big berries. (See color picture inside back cover.) Robinson foliage is completely healthy and even on weak plants we have never seen any foliage injury or disease.

For a berry that is sure to grow, nothing will surpass Robinson in the north. It usually makes too many runner plants so that some thinning is necessary. As a processor Robinson has not ranked high, but is accepted widely in areas where large quantities of Robinson are produced. Profit is the motive for planting Robinson. Despite its weak points it will soon be planted widely by many growers who remember the dollars that rolled in with Robinson. Price list page 28.

ALBRITTON

The Carolina Beauty

Albritton is best adapted to the coastal region of North Carolina and to a limited degree to the coastal areas of Virginia and Maryland. The plants make a very vigorous growth and are quite productive when grown in this area. If you move north you do not get the high yields obtained in North Carolina.

Albritton berries are beautiful. We know of no other strawberry that has more class and they demand a premium price in markets where they are available. The berries in color are vivid red, turning to deeper red when fully ripe. They are usually glossy, uniform in shape with exceptional flavor and large size. Albritton is not generally considered a good freezing berry.

We have a limited supply of some very beautiful Albritton plants that will produce for you. Price list page 28.

✓ CATSKILL Our Sales' Leader

Catskill remains the "King of All Strawberry Varieties," judging by our customers, who really are the ones to know. The virus-free stocks, which brought the return of the original vigor of Catskill, make yields of from ten to fourteen thousand quarts per acre not uncommon. Catskill is popular for many reasons.

1. **Adaptation.** Catskill is well adapted to all the northern states and the higher altitudes as far south as North Carolina and westward beyond the Mississippi River.
2. **Berries.** Catskill berries are of large size, moderate firmness if handled correctly, good quality and very attractive appearance. (See color picture on back cover.)
3. **Hardiness.** Catskill has an amazing record of producing successive crops of fine fruit. It has been a sure thing over a long period and we consider it one "must" berry for growers in the upper middle and northern states.
4. **Productiveness.** Catskill has more nice large size fruit and gives a greater total quantity of berries than any other equally productive variety.
5. **Use.** Catskill berries are fine for the fresh market and quite acceptable for freezing. They cap easily, which is quite important where capping machines are in use.
6. **Bonus.** Catskill carries a higher than average percentage of Vitamin C of which strawberries are one of the best sources. In addition, Catskill berries will stand wet weather at picking time better than other varieties which are actually firmer.

CATSKILL COMMENTS

Illinois—Madison Co., June 19, 1964. "I have intended writing to you about the strawberry plants we ordered from you last year; they arrived in good condition and there were about 20 extra plants (300 Catskill). This spring our berries were just wonderful and they were very large and sweet. One good point—they grow tall plants and the berries don't touch the ground, so they are a good keeping berry." Mrs. Harold Wadlow.

Massachusetts—Worcester Co., May 17, 1964. "We bought Catskill from you when we were living in Vermont and honestly we can never tell you how nice they were and praises from our customers were tremendous." Harry P. Donnelly.

Ohio—Summit Co., July 2, 1964. "My Catskill berries were wonderful—out of this world—some as big as silver dollars. I had 700 plants and I got over 800 quarts." Russell Hughes.

Pennsylvania—Elk Co., May 12, 1964. "We have found your Catskill to be far superior to any other variety for this region, both from the standpoint of disease resistance and withstanding cool, damp nights at fruiting time." John Guroskik.

Pennsylvania—Northumberland Co., March 12, 1964. "I planted 1,000 of your Catskill plants in the spring of 1962 and picked 3,350 quarts in 1963. Every plant grew." Willard E. Ross.

Our plants of the Catskill variety are strong and vigorous. We urge you to order early. Price list page 28.





REDGLOW

The American Beauty

DIXIELAND

Firm and Light in Color





MIDWAY

Midseason and Productive

ALLEN'S
Standard of

80



POCAHONTAS

Firm and Adaptable



TENN. BEAUTY

Best Late in Middle States

PLANTS Industry for STRAWS



EMPIRE

Large and Attractive

ARMORE

Vigorous and Productive



VESPER

Very Large and Very Late



SPARKLE For Quality and Yield

Sparkle is the most popular late variety in the northern states from our experience. It remains among our best sellers and ranks in productiveness with other leaders such as Catskill, Midland and Pocahontas. Sparkle plants are exceptionally vigorous in growth and where growing conditions are favorable plant thinning is frequently necessary to improve fruit size. The plants are resistant to the most common strain of red stele, providing an added element of safety to the grower when this may be a problem. Sparkle plants bloom very heavily so that fruiting time always finds them loaded with sparkling Sparkle berries.

Superb in quality. They are far better than Earlidawn, Robinson, Pocahontas, Surecrop and others with which they compete.

Pretty as a picture. The name Sparkle was taken from the fact that the berries actually do sparkle on the vine. (see color pictures on front cover)

Always in demand as a fresh market favorite. Where well grown and carefully picked their shine and finish make them very attractive.

Rich crimson red. They are very beautiful, and although they do darken somewhat on holding, this is no disadvantage.

Known for berries medium to large in size. Where moisture is ample and plants are not too thick, the plants can fully size the large number of berries which are produced.

Late in bearing. The crop is rarely affected by frost, which is the best crop insurance the grower can have.

Excellent for freezing. The fine quality helps, but the rich crimson red color extending clear through the berry is what makes Sparkle topnotch for freezing.

SPARKLE BOOSTERS

Grafton Co., N. H., March 3, 1964. "The 400 Sparkle I set in the spring of 1962 produced about 600 quarts last season. Fine berries from fine plants." D. B. Dickinson.

Preble Co., Ohio, Jan. 20, 1964. ". . . In fact the Sparkle plants became too thick and I think that reduced the yield on this variety. Early last year the plants looked beautiful. Then came two heavy frosts after some berries were the size of marbles. There had been such a tremendous bloom that they still came on." Clifton Samson.

Bayfield Co., Wisc., July 9, 1964. "Am writing to let you know how good your plants came for us this year. Of the 30,000 Sparkle about every one lived." Betzold's Orchards.

Again this season our Sparkle plants are very beautiful and in fairly adequate supply. Price list page 28.

(see color pictures on front cover)



Best
for
late
in the
Middle
States

✓ TENNESSEE BEAUTY

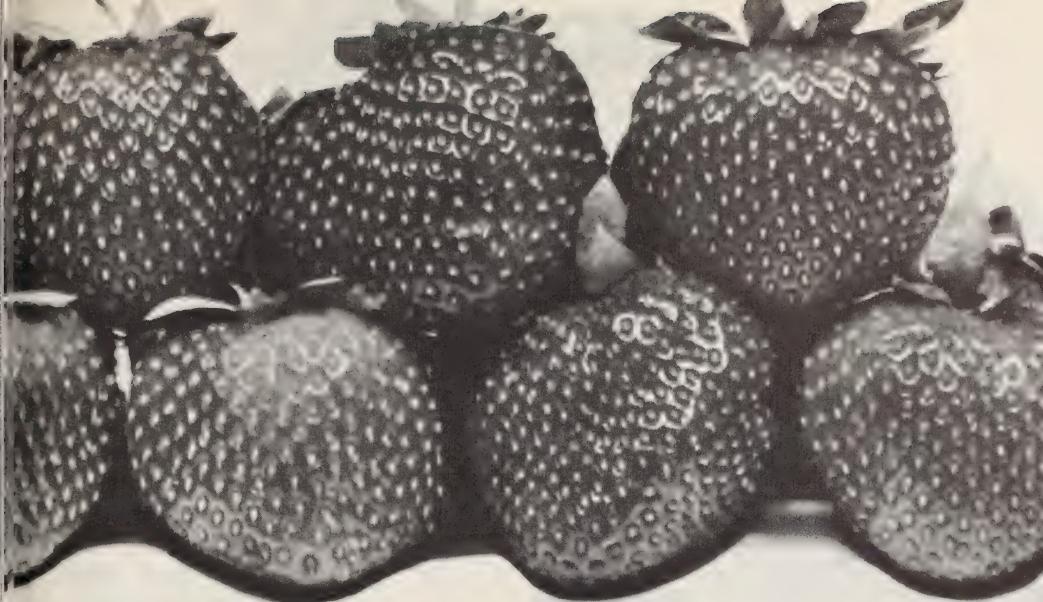
Tennessee Beauty berries are as pretty as can be found under good conditions. (See color picture middle of catalog.) They run medium to large in size when moisture is adequate and the plants have not been allowed to grow too densely. The caps are outstanding in appearance and come off quite easily, which sometimes poses a problem during picking. Both for freezing and processing the berries are regarded as very good. Tennessee Beauty is excellent for shipping and firm enough so that delays in picking, because of weather or lack of help, result in very little loss.

The plants are very healthy and quite productive with foliage resistant to leaf spot and other disorders. They produce runners very freely and some thinning is necessary to maintain berry size. Although we know and realize that Tennessee Beauty is not as good as it used to be, we feel it is still the best choice in the middle states for a late variety. We have a nice supply of beautiful Tennessee Beauty plants. Price list page 28.

✓ ARMORE

Armore is a variety suitable for both commercial and home garden use because the berries not only rate well for freezing but also have a fine dessert quality. The berries will darken if held for some time. The berries are large, irregular, wedge shaped, with light flesh of medium firmness. (See color picture facing page 15.) They remind one somewhat in appearance of Catskill with later berries being of a round-conic shape and not as irregular as the first ones.

The plant growth is vigorous and you always have plenty of runners for a good fruiting bed. Armore is quite productive and widely adapted. For a large, productive, late variety you cannot go wrong with Armore in the middle states. Price list page 28.



✓ JERSEYBELLE

Jerseybelle berries are very fancy (see color picture back cover) and so outstanding for beauty and size that they never fail to bring the top price. It should be picked at just the right time and handled carefully and promptly. When picked closely, while the berries are still bright red and before they get a deep red color, it is firm enough for retail trade and over-night shipment. The berries have a shiny skin with a tough surface and rather prominent yellow seeds. The cap is large and showy, which is a sales asset. The flavor of the fruit is best described as mild, even becoming bland when fully ripe.

With virus-free stocks Jerseybelle has become one of our better growers and makes a good amount of runners under nearly all conditions. Plants are vigorous and remain free from disease although there is a tendency toward leaf spot which can easily be controlled with copper.

Jerseybelle territory continues to grow slowly and it is moving westward from the area of Delaware, New Jersey and New York.

For beauty and size, try Jerseybelle. Price list page 28.

✓ VESPER (NJ 157)

Vesper fruit is of a rich red color, with a beautiful gloss if harvested at the proper stage of maturity. The primary fruits are furrowed, becoming smoother later, but without the over-all smoothness and uniformity of Jerseybelle. The berries are very large with the cap large and showy and the seeds are raised and attractive. (See color picture opposite page 15.) Vesper ripens very late, between Jerseybelle and Redstar and has been reported as very productive in nearly all cases.

We have heard disquieting reports about Vesper from some of the large commercial growers. The major complaint is that the berries do not carry well. It would be well to check with growers in your area before making a major commitment to this variety.

We have a nice supply of vigorous, well-rooted plants. Price list page 28.

REDSTAR

The Best Real Late and the Latest Real Good Berry

Redstar berries are large and wedge shaped, later becoming mostly round-conic. They are fine in quality with an attractive bright red color which darkens very little on holding.

One problem with Redstar is fasciation, which occurs when several fruiting stems apparently combine forming a broad flat stem. The berries become broadened and contorted, making them less desirable. This condition still exists to some extent with our new virus-free stocks, but much less than formerly. The berries average large in size, are firm enough to ship well and attractive enough to sell well.

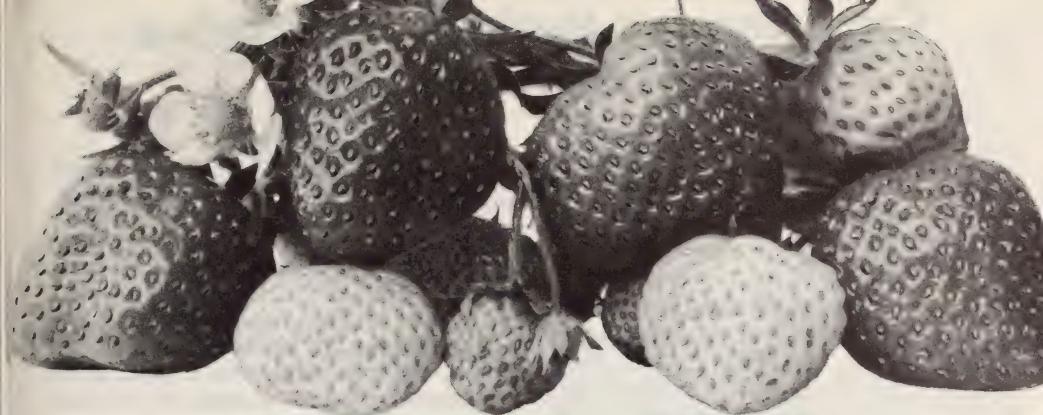
It is easy to get a fine fruiting row with healthy, beautiful foliage with virus-free plants. Because of its lateness, Redstar should be grown where ample moisture is available at fruiting time, either from moist soil or irrigation; because of its lateness in blooming, Redstar is never killed by a late frost so that you are sure to get a crop to extend the season for fancy fruit.

A home gardener can stretch the season feeding the family fine desserts after other berries are finished. A commercial grower can handle a far greater volume of berries with a given amount of help. Redstar is the best real late berry and the latest real good berry. Price list page 28.



AMBROSIA

Ambrosia produces heavy crops of large, attractive, light colored berries. Quality is only fair as most people consider it quite tart. Ambrosia makes a strong, vigorous growth but it is somewhat susceptible to leaf spot. The lateness of Ambrosia bloom means you always have berries to sell, and the lateness of Ambrosia ripening means they usually sell well. Price list page 28.



SUPERFECTION

Our Leading Everbearer

Superfection is still our leading everbearer because it is the best in producing berries when you want them—in late summer and fall. Superfection berries are light in color and quite attractive in appearance. (See color picture inside front cover.) They are firm enough to ship moderate distances but in most cases they are used at home or sold at local markets. The flavor is quite tart but with sugar Superfection is a fine addition to late summer and fall desserts.

All everbearing varieties should be planted in hills with the runners removed. The Ohio System, described on page 26, has been most satisfactory for many growers. Growing Superfection in the hill system and removing all runners usually gives a good stand of plants with good crops of fruit. With adequate moisture Superfection will set plants quite freely. Under conditions of extreme heat and drought they will die out unless irrigated.

Superfection is also sold as Gem, which was the original name. In past years a variety known as Brilliant proved to be identical with Gem and Superfection. With virus-free plants to eliminate differences in vigor of individual stocks you will find Gem and Superfection identical. Order them by either name and you will have the best of the everbearers.

Our plants are strong, well-rooted, true to name and virus free, giving you every chance for good results with everbearers. Our supply of this variety is always limited, so we urge you to order early. Price list page 28.

Danville, Va., April 21, 1964. "My order for Superfection plants arrived in good condition. Very pleased with the nice healthy plants. Everyone is living and growing perfectly." Mrs. M. N. Green.

STREAMLINER

Streamliner berries are of a medium to large size, having a good red color clear through. Both the flavor and appearance are good. The plants produce a spring crop and continue to bear through late summer and fall, with the best crop in the fall. Many growers in the middle latitudes have reported favorably on this variety and it is worthy of trial if you are interested in everbearers. Price list page 28.

OZARK BEAUTY

We have a limited number of virus-free plants of this new everbearer from Arkansas to offer this year. From our observation, plant growth has been freer than with most everbearers. Experiment stations in the midwest have been most enthusiastic. Price list page 28.

Commonsense Methods for Growing Good Strawberry Crops

Strawberries are grown successfully in every state in the country. They are relatively easy to grow. Beginners can produce fine crops by following commonsense methods.

When Do They Bear? Standard varieties set in March, April or early May, 1965, will bear their best crop in May, or June, 1966. Everbearing varieties set in early spring produce berries in late summer and fall of the same year. Fall setting is not a good practice in most cases.

Fall Planting. In spite of some very good results, setting plants in late August, September or early October with the idea of getting a partial crop the following May or June is not generally a good practice. Even if good dormant plants were available, results in most cases do not justify the extra effort. The variety most commonly used is Pocahontas. Setting the plants in late October or November to get the job done when not so rushed by work as in the spring or to avoid the hazards of delayed planting in spring due to bad weather is rarely justified now that dormant plants are available. Any advantages should be weighed against the time and trouble of mulching through two winters instead of one and more work in controlling weeds and grass. Usually a part of the fall set plants fail to survive the winter, but those that do survive start earlier and grow better than spring set plants.

What Kind of Soil and Location are Best? Any soil that makes good yields of garden or field crops will produce strawberries in abundance, whether that soil is a light sandy loam or a heavy clay. Here are some pointers. 1. In rolling country a sloping field gives better air drainage and less injurious frosts. 2. Run the berry rows across a steeply sloping field rather than up and down to help prevent erosion. 3. Follow a hood crop to make less weeds and grass to contend with in the strawberries. 4. Avoid sod land that may

harbor grub worms which cut or injure your plants. Use of chlorodane or aldrin (see page 23) makes the use of sod land much safer. With treatment we would prefer good sod land to poor cultivated land. 5. Change the place of the strawberry bed every few years. It will help keep up the vigor and growth and reduce the danger of a build up of disease and insect trouble. 6. A rank growth of weeds and grass on a vacant lot, garden plot or unused field indicates soil fertile enough to grow good crops of strawberries. 7. Most important of all—Select land that holds moisture well because (a) it is naturally springy, (b) it has a high water table, (c) irrigation is available or (d) because lots of organic matter in the form of animal manures or green crops has been incorporated in the soil.

Land Preparation. In late winter or very early spring the land should be plowed or in small plots spaded to a depth of 6 to 8 inches. Then with harrow or rake it should be leveled off to form a smooth friable planting bed. Here are some things which are not necessary but which are very helpful in getting bigger, better crops of berries:

1. Plowing under in late summer a heavy growth of green crops such as peas, beans, clover, sowed corn, weeds, grass, etc. All these rot quickly and are much more valuable for the strawberry crop if plowed under while still green.
2. Early fall sowing of rye or wheat to give a heavy sod to be plowed under in late winter or very early spring. This will be easier to handle if disced up thoroughly before plowing.
3. Applications of horse, cow, hog or sheep manure at the rate of 5 to 20 tons per acre. This is the best of all preparation for a fine crop of berries. Results are almost equally good if one of these applications has been made for the previous crop. Poultry manure is better when applied to the previous crop but is helpful to current crop if

full of litter and only three to four tons per acre are used. Excessive applications of poultry manure may cause some burning, especially in dry seasons. If used, apply poultry manure to field or garden in the fall for spring planting.

For small areas a good guide in the application of horse, cow, sheep or hog manure is to figure one to two bushels for every 100 square feet. Manure from poultry and broiler houses either contains chick weed seed from feed or bedding or stimulates excessively the growth of chick weed, which becomes very serious in many strawberry growing areas.

When Should Plants Be Set? EARLY!

The most important single thing in growing strawberries successfully is to set the plants EARLY. With no other crop that you grow is early spring setting so ALL IMPORTANT. With dormant plants available, plants can be set safely at least two weeks later than with freshly dug stock. In the southern states this means February, March and early April; in the middle states, March and April; in the northern states, April and May. In all states it means just as early as the weather permits you to get the ground ready and the plants set. A good stand and growth are easy if plants are set early so they can become established while the soil is still cool and moist. With late setting good results are very unlikely unless soil and moisture conditions are entirely favorable.

Should Chemical Fertilizer Be Used?

On very fertile garden soils none is needed. On most good soils fertilizer will not prove beneficial if plenty of stable manure of any kind has been applied. On many soils chemical fertilizers will be very helpful. 600 pounds per acre of any fertilizer containing 3 to 6% of nitrogen and 5 to 10% of phosphorus may be used. This may be stirred into the soil down the row before the plants are set or applied as a side dressing in one or more applications after growth starts. Inorganic nitrogen like nitrate of soda or sulphate

of ammonia should be used in these applications only with great care, as they will injure either roots or leaves if they come in direct contact. Organic nitrogen materials like tankage, fish, dissolved bone, cotton seed meal or dried blood are safe to use. Any form of phosphorus is satisfactory. Potash is not usually a limiting factor. However, we sometimes use a fertilizer with 2 to 3% of potash just as insurance.

Whatever the soil preparation and earlier treatment, it is well to examine the plant beds in late August or early September. If the growth is satisfactory and the leaves have a rich dark green appearance, no further fertilizer is necessary. If color and growth are not satisfactory at that time apply as a top dressing directly on the plant beds about 600 pounds per acre of 6-8-2 or any fertilizer mixture your dealer has containing 4 to 6% nitrogen, 6 to 10% of phosphorus and 2 to 5% of potash. Apply only when foliage is thoroughly dry and brush loose material off the leaves at once. This is important to prevent injury.

An application of 600 pounds per acre means about 1 pound for each 20 feet of row.

PLANTS FOR VARIOUS PLANTING DISTANCE

Rows	In the row	Total per acre
3 ft. apart	18 inches	9,680 plants
3 ft. "	24 "	7,260 "
3½ ft. "	18 "	8,297 "
3½ ft. "	24 "	6,223 "
4 ft. "	18 "	7,260 "
4 ft. "	24 "	5,445 "
3 ft. 8 in. "	18 "	7,128 "

What About Lime? If other crops, weeds or grass have made a good growth on the land you have selected for strawberries it does not need lime. However, if you want to have your soil tested for acidity a pH range of 5.7 to 6 is best; 5 to 7 is satisfactory if organic matter content of the soil is fairly high.

What Care Do Plants Need? They should be set promptly on arrival if possible. Dip the roots in water and keep them protected when taken to the garden or field for setting. A hot day is bad for setting strawberry plants. A hot windy day is terrible. A cool cloudy day is fine. Sometimes plants must be kept a while because the ground is not ready or for some other reason. Small lots of plants can be kept in the family refrigerator if there is room. Burying the crate or package for a while in a snowbank is satisfactory. Never, never put your plants in a deep freezer where the temperature will go below 28 degrees Fahrenheit.

The very best way to hold plants is in cold storage at 28 to 32 degrees Fahrenheit. If such storage is not available, open the bundles and spread the plants in thin layers along a V-shaped trench about four or five inches deep. Cover the roots with two or three inches of soil, leaving the buds exposed. Wet the soil and plants thoroughly. A light covering may be necessary. Incidentally, there is one way to play safe. If you have cold storage available, order your plants shipped in March while they are still thoroughly dormant. Moderate delays in transit won't hurt them at that time and they will keep perfectly in cold storage at 28 to 32 degrees F. until planting conditions are just right. If plants are dug after they have made lots of foliage and possibly blossoms, they should not be held more than a few days even in storage.

What Is The Best Method Of Setting Plants? Any method is good which leaves the roots reasonably straight down in the soil. It is best if the roots are spread with the soil pressed tightly against them and the bud just at the surface. With plants that have very long roots, clipping them off to about 4 to 5 inches, which will not hurt the plants, will make a good job of setting easier. No matter how long or how short the leaf stems, fruit stems or roots may be at time of setting, the bud must be just at the surface. (See picture)



As far as setting tools are concerned, a good garden trowel is best for work in small plots; in larger fields it is common practice to use a transplanter. With a transplanter, it is very important that the setting depth of the plants be checked behind the planter.

How Far Apart Should Plants Be Set? In general we recommend setting plants 18 to 20 inches apart in rows 4 feet apart. This requires a little over 7,000 plants per acre. (See table) Somewhat closer planting is satisfactory in small gardens where space is limited, for the hill system as with everbearers, or for late setting where a good stand is uncertain. Closer setting is suggested also for varieties that make few plants and for varieties which are not virus free.

For the small garden order 7 plants for each 10 feet of row you want to set or figure 1 plant for each 5 square feet. Thus for a plot 10 x 10 you would need about 20 plants.

High yields can be had from small plots by using the hill system where all runners are cut off. Use planting plan suggested for everbearers on page 26. There are many variations of the hill system. One of the most practical is to use a double hill row with plants 12 inches apart in the row and 30 inches between each double hill row. This plan makes possible economies in cultivation and runner cutting. All hill system plans require extra plants.

Hoeing, Cultivating and Training. Frequent hoeing and cultivating make larger, stronger fruiting beds and a better crop of berries. The purpose is to keep down weeds and grass and to keep the top soil loose. Loose top soil helps conserve soil moisture and makes it easier for new runners to take root. Shallow cultivation is best, 1 to 1½ inches deep with the hoe or slightly deeper with cultivator.

(1) Uncover the buds. At the first or second hoeing any of the plant buds which have become covered with packed or caked dirt must be uncovered. Neglect in doing this is often the greatest single cause of a poor stand. The outside leaves may remain fresh and green for sometime but if the bud is smoothed the whole plant will eventually die.

(2) Cut off the blossoms at each hoeing. The vitality necessary to mature a cluster or two of berries is needed by the newly set plant to make a strong, vigorous plant growth.

(3) Most of the training of new runners is done at hoeing time. A well spaced matted row is the best system for getting the largest crops of the best berries. It will not pay to be too fussy about exact spacing distances but it should be kept in mind that 4 to 8 plants per square foot of fruiting bed is enough. An excess is no better than weeds. Train the first strong new runners out like spokes from a wheel and root them until a fruiting row 1½ to 2½ feet wide has been formed. When that has been done as many

as possible of the later runners should be pulled or cut off.

Weed Killers. There is much work being done with weed killers at the various State Experiment Stations. We recommend that you write the Experiment Station in your state for their recommendations for your locality. In the right situation weed killers can be a tremendous help but nobody should set an acreage of plants too large to care for if the weed killers do not do the job. We doubt if chemical weed control is practical or necessary on very small plots.

Is Mulching Necessary? Mulching is necessary for winter protection in all the northern states and would be helpful in many fields as far south as Virginia and Kentucky. In addition to giving protection from cold, mulching helps to keep down weeds and grass, to conserve soil moisture and to keep the fruit bright and clean.

The mulch should be applied in the fall after frost and light freezes (25 to 28 degrees F.) have occurred but before hard freezing (20 degrees F. or lower). It should be removed, at least partly, soon after growth starts in the spring.

Wheat straw and marsh grass are considered the best materials. Rye straw, pine needles, coarse strawy manure and various kinds of hay are satisfactory. In some sections sawdust has been used with good results; also buckwheat hulls. Use whatever you have or can buy at a reasonable price.

Will Irrigation Pay? If you have irrigation it will certainly pay to use it for strawberries, especially just before fruiting time. However, irrigation is not mandatory. Most of the fine berry crops in this country are produced on good strawberry soil that holds moisture well because stable manure and green crops have been added or because of a high water table. Evidence piles up that irrigation during the danger hours will save a strawberry crop from severe frost and freeze damage with temperatures as low as 20 degrees F. during bloom.

Insects and Diseases. Red stele has become serious in some areas. It is avoided by using clean plants on uninfected soil. Red stele can be largely overcome on infected soil by using resistant varieties. (see page 26.) Verticillium wilt, a soil-borne fungus, has been developing as a serious problem of strawberries within the past few years. Selection of resistant varieties and not planting after susceptible crops such as tomatoes, Irish potatoes, eggplant and peppers, are the best controls to date. (See page 26).

Several insect pests and various fungi attack strawberry plantings. These pages do not permit a discussion of the various problems or their control. We recommend that you

contact your local County Agent and your State Experiment Station for whatever pamphlets and help you may get with these problems. The U. S. Department of Agriculture has two bulletins which are quite good. Farmers' Bulletin No. 2140 (Strawberry Diseases) and Farmers' Bulletin No. 2184 (Strawberry Insects) can be obtained from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., for 15¢ and 10¢ respectively.

Renewing Old Beds. Most commercial growers pick one crop of strawberries and then destroy the planting. Generally this is justified. However, when plantings are on good soil, free from weeds with little insect or disease damage, a second crop may be had economically. To renew beds, don't plow away the old bed. Cultivate middles, remove weeds and grasses and possibly fertilize. On thickly set beds remove some of the excess plants. Don't be afraid of hurting the beds. We have used a heavily weighted (100 lbs.) spike tooth harrow very effectively. Train new runners to any vacant places. Mostly the second crop of berries is borne on the same plants that produced the first crop.

Odds and Ends.

(1) A national conference on the strawberry was held at Rutgers in January, 1963, with nearly all the important research men in the United States and Canada present. Subjects covered included varieties, nutrition, weed control, marketing, labor saving machinery, irrigation, planting problems and control of insects and diseases. This conference presented a source of the most up to date information available. Copies of the proceedings are available at \$2.50 each by writing Norman F. Childers, Chairman, Department of Horticulture and Forestry, Rutgers-The State University, New Brunswick, N. J.

(2) The use of chlordane or aldrin to kill ants, cutworms and grubworms is one of the things that the small grower can do. It is combined with the fertilizer for general application before plants are set and applied at the rate of about 10 lbs. per acre of the actual material in the case of chlordane. For further information consult your local dealer, County Agent, or write us.

(3) Growing strawberries in barrels. The idea of growing strawberries in barrels appeals to those who love growing plants, especially berry plants, but who have only limited space. When tempted to try a berry barrel it should be kept in mind that even if successful it is not an economical way of growing berries. Most of your satisfaction must come from the beauty of the foliage, blooms and berries rather than in the quantity and utility of the berries themselves. For further information write for our mimeographed sheet on this subject.

FAMILY GARDEN COLLECTIONS

Bargains in Gardens

You get the Best and they cost you Less

We feel that a berry garden should be a "must" with every family. Some of the reasons strawberries are so popular are these:

Everybody can grow them—Experience is not necessary to grow good strawberries. Beginners can grow them successfully and profitably. It is an ideal crop for women, children, older folks, retired persons and farmers with small acreage who need a high income per acre crop.

Versatility—Strawberries can be enjoyed in many ways—fresh from the vines, in preserves and jam and strawberry shortcake. That fresh flavor can be enjoyed the year round by freezing some of them.

A taste treat—The beauty and taste of strawberries rate them as a luxury but one you can afford if you grow them yourself.

Health—Good health comes through the exercise and fresh air incident to planting, growing and picking berries. In addition, strawberries rate as one of the highest of all foods in vitamin C.

Order one of the Collections on these pages. We pay the postage anywhere in continental U.S.A.

MIDDLE STATES GARDEN COLLECTIONS

Well adapted for heavy production of luscious berries anywhere in the U.S.A. except northern and extreme southern areas.

MIDLAND—Very early; freezing excellence.

FAIRFAX—Finest quality; the garden berry deluxe!

POCAHONTAS—Productive and firm; large size.

TENNESSEE BEAUTY—Best late variety for the middle states.

Collection A— 100 plants, 25 each of the 4 kinds.....\$ 6.40 (Postpaid)

Collection B— 200 plants, 50 each of the 4 kinds.....\$10.25 (Postpaid)

Collection C— 400 plants, 100 each of the 4 kinds.....\$16.40 (Postpaid)

Collection D—1000 plants, 250 each of the 4 kinds.....\$32.00 (Postpaid)



Scioto Co., Ohio, Jan. 18, 1964. "Having received 100 of your Pocahontas plants in the spring of 1962, we picked an unbelievable yield of 303 quarts in the spring of 1963. Three quarts per plant! Of that amount I sold 200 quarts at 50¢ per qt. Some of the remainder are in our freezer, still to be enjoyed on these bleak winter days." Lewis E. Crum.

NORTHERN STATES GARDEN COLLECTIONS

Well adapted for heavy production of excellent berries in northern U.S.A. and Canada, south to about the Ohio River Valley and southern Pennsylvania.

EARLIDAWN—Earliest of all; frost resistant.

EMPIRE—Good dessert quality; dependable producer.

CATSKILL—Hardy and productive; our best seller.

SPARKLE—Late; excellent for freezing; productive.

Collection E—100 plants, 25 each of the 4 kinds.....	\$ 6.55 (Postpaid)
Collection F—200 plants, 50 each of the 4 kinds.....	\$10.45 (Postpaid)
Collection G—400 plants, 100 each of the 4 kinds.....	\$17.10 (Postpaid)
Collection H—1000 plants, 250 each of the 4 kinds.....	\$32.50 (Postpaid)

Geauga Co. Ohio, May 25, 1964. "I would like to tell you how pleased we are with the plants of Collection G shipped on April 29. Out of the order for 400 plants we could find only three that may not live. We certainly couldn't expect a better percentage. Also we are already picking blossoms off the Earlidawn." Mrs. E. Thomas Ault.

NEWEST VARIETY COLLECTIONS

Try these new ones. All have met rigid standards before being released.

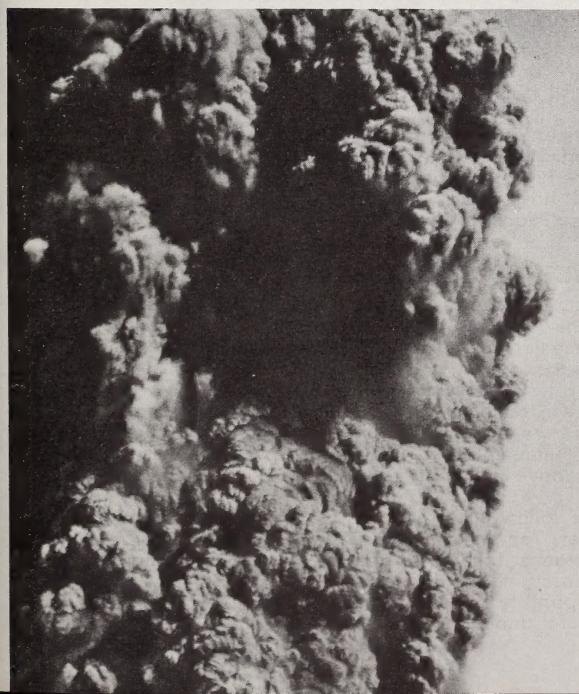
REDGLOW—Outstanding beauty, size and quality.

MIDWAY—Good for desserts and freezing; robust plants.

SURECROP—Midseason; exceptional vigor; large attractive berries.

VESPER—Very large and very late; productive.

Collection K—100 plants, 25 each of the 4 kinds.....	\$ 7.00 (Postpaid)
Collection L—200 plants, 50 each of the 4 kinds.....	\$11.15 (Postpaid)
Collection M—400 plants, 100 each of the 4 kinds.....	\$17.85 (Postpaid)
Collection N—1000 plants, 250 each of the 4 kinds.....	\$35.15 (Postpaid)



Pike Co., Ohio. "The plants I received of Midway, Redglow, Vesper and Surecrop are the finest plants I ever bought. They have such a healthy color and nice roots. I was real pleased with them." Mrs. Mary Vallery.

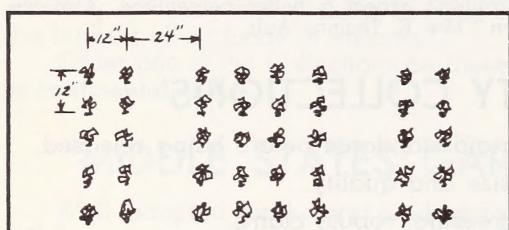
Even Volcanoes do not keep Allen's Plants from growing.

Cartago, Costa Rica, Feb. 20, 1964. "I have the pleasure of informing you that the strawberry plants were received without delay. They are already planted and growing, nevertheless the rain of ashes that our neighbor volcano 'Irazu' threw up when the plants had only 8 days of being planted. I am enclosing herewith a picture showing one of the many eruptions that the volcano has done during the year of constant activity." Manuel Escoto.

FOR BEST RESULTS WITH EVERBEARERS

USE THE SAWDUST MULCH SPACED PLANT SYSTEM

The Ohio Station reports that the best development in everbearing strawberry production demonstrates that the largest yields, greatest ease and economy of operation and highest profits are to be secured by following a four-row bed type planting system. (See diagram and picture below.)



Later weeds, if any, must be removed by pulling because hoeing would mix the sawdust with the soil and eliminate its mulch effect.

All blossoms which develop on the new set plants should be removed until early June, or later if plant growth has not been vigorous. After fruit production starts berries may be harvested about twice each week until frost stops growth in October. The sawdust mulch helps to conserve soil moisture during late summer. If an extended drought occurs the crop can be greatly increased in size and quality by the use of irrigation. All runners should be removed from the plants as fast as they develop. This is essential if highest yields are to be secured.

"The sawdust mulch appears to give adequate protection over the winter period. A thin renewal layer may be needed in the fall if the spring application was too light. A full inch of mulch should be maintained."

The spaced-plant sawdust mulch system comes high per acre, with more plants and much hand labor required, but numerous reports have indicated in small and medium sized plantings that a carefully managed patch will give high profits.

This Ohio system and variations of it have been used in recent years in many other states to enable growers to get far more satisfaction from ever-bearers than they did before. (See page 19.)

VARIETAL RESISTANCE TO STRAWBERRY DISEASES

Red stele is a subject of continuing research. At least five different races of red stele root rot have been identified. Among the varieties with resistance to the most common form are Midway, Redglow, Sparkle, Stelemaster, Surecrop, Temple and Vermilion. Stelemaster and Surecrop have resistance to other races of red stele and seem to be your best bet where red stele is a major problem.

Varieties have varying degrees of resistance to verticillium wilt. This disease is only a problem in some areas of the north and we have never seen it on our farms here in Maryland. Verticillium wilt, which causes "summer dying" of strawberry plants, has been particularly bad when strawberry plants have followed a susceptible crop such as tomato, Irish potato, eggplant and pepper.

Dr. Varney of New Jersey reports the following information: Among the resistant varieties are Catskill, Surecrop, Robinson, Premier, Temple, Tennessee Beauty and Gem. The varieties with an intermediate degree of resistance include Blakemore, Redglow, Empire, Fairfax and Albritton. The most susceptible variety to verticillium wilt is Earlidawn. Among those varieties with a high degree of susceptibility are Dixieland, Redstar, Midway, Jerseybelle, Midland, Missionary, Pocahontas, Armore and Sparkle.

In this system the plants are set one foot apart in rows which are one foot apart. A two-foot alley or middle is left between each 4-row bed. The 4-row system produces high yields in August which are maintained during the remainder of the season.

The plants should be set just as early in the spring as the land can be prepared—late March or early April. The first crop of weeds will usually appear within two or three weeks after planting. These should be controlled by hoeing. After this first hoeing the entire area should be covered with a layer of sawdust one inch thick. This mulch is very important for conserving soil moisture and suppressing weed growth.

Plants referred to as "virus free" in this catalog have been field grown by us from virus-free foundation stock furnished by the U. S. Department of Agriculture, Bureau of Plant Industry, Soils, and Agricultural Engineering, Beltsville, Maryland. Our field-grown stock has been dusted with parathion to control aphids which transmit the virus diseases. It has also been grown at considerable distances from any other strawberry plants. Since viruses do not produce clear-cut symptoms in most strawberry varieties but simply weaken and devitalize the plants, no guarantee can be made that these plants are 100 percent free of viruses. Because of the measures that we have used to protect these plants from virus infection, we believe them to be substantially virus-free.

All plants from virus free sources which meet the rigid growing requirements of our Inspection Service are entitled to be sold as "Registered." All our virus free varieties have met these requirements and will carry a label showing they are "registered." We hope W. F. Allen Company will receive your plant orders, but in any event you should get plants which meet the rigid requirements which entitle them to be registered.

INSTRUCTIONS TO PURCHASERS

Terms: Cash with order. Remit by money order, bank draft or cash in registered letter. No C.O.D. shipments without part payment. **True to Name:** We take every precaution to have all plants true to name and we will refund your money if any prove otherwise, but we will not be responsible for any sum greater than the cost of the plants ordered.

When to Order—How to Ship

Order as soon as you have decided what varieties and how many you want. Plants will be reserved for you. Indicate on the order sheet the approximate date you want the plants shipped to you. See paragraph on page 21 "When Should Plants be Set?". Write plainly so that we can get your name and address correctly for prompt acknowledgement of order and delivery of plants.

Express—Cheaper on shipments of 3,000 plants or more and on 2,000 plants in the fifth postal zone or farther. Charges can be collected at time of delivery. There is a minimum express charge of \$2.90 on any size shipment.

Parcel Post—Generally cheapest and most satisfactory for all shipments up to 1,000 plants everywhere and on larger shipments up to 2,000 plants in the 4th postal zone or nearer. Parcel post charges depend upon weight of shipment and postal zone. On parcel post shipments be sure to include postage figured from the table and guide on this page. We recommend "Special Handling", as this expedites delivery. Charges for this service vary from 25¢ to 50¢ depending upon the weight of shipment. Send enough postage as any excess will be returned to you. **We do not advise C.O.D. shipments** as they require from 40¢ to \$1.00 additional postage. Also delivery may be delayed for two or more days. **COLLECTIONS** offered on pages 24 and 25 are **prepaid** and no postage need be sent for these. **Our Guarantee:** We guarantee all plants ordered shipped before May 15 to reach you in good condition. If they are found to be otherwise, either through a slip on our part or delay or mistreatment in transit, notify us immediately so that we can refill your order. Any claim for poor condition must be made immediately on receipt of plants as we cannot be responsible for drought, floods, insects, etc. which may affect the plants after their arrival, as these things are entirely beyond our control.

ZONE GUIDE

To help determine postal zone, consult this guide; if convenient ask your postmaster. Zone 2—includes Trenton, N.J., Harrisburg, Pa., Philadelphia, Pa., Hagerstown, Md., Charlottesville, Va., Richmond, Va., Norfolk, Va.

Zone 3—includes Hartford, Conn., New York, N.Y., Pittsburgh, Pa., Roanoke, Va., Wilmington, N.C.

Zone 4—includes Portland, Maine, Boston, Mass., Albany, N.Y., Buffalo, N.Y., Cleveland, Ohio, Cincinnati, Ohio, Detroit, Mich., Indianapolis, Ind., Louisville, Ky., Nashville, Tenn., Atlanta, Ga.

Zone 5—includes the entire state of Illinois, St. Paul, Minn., St. Louis, Mo., Little Rock, Ark.

Zone 6—includes Houston, Texas, Oklahoma City, Okla., Kansas City, Mo.

Zone 7—includes El Paso, Tex., Denver, Colo.

Zone 8—includes Salt Lake City, Utah and Pacific Coast states.

EFFECTIVE APRIL 1, 1964 SURFACE PARCEL POST RATES

Lbs.	Local	1 & 2	3	4	5	6	7	8
1	\$0.29	\$0.40	\$0.42	\$0.46	\$0.52	\$0.59	\$0.66	\$0.72
2	.29	.40	.42	.46	.52	.59	.66	.72
3	.31	.46	.49	.55	.64	.73	.83	.93
4	.33	.51	.55	.64	.75	.88	1.01	1.13
5	.35	.57	.62	.72	.87	1.02	1.18	1.34
6	.37	.62	.68	.80	.97	1.15	1.34	1.53
7	.39	.68	.75	.88	1.07	1.28	1.50	1.73
8	.41	.73	.81	.95	1.18	1.41	1.66	1.92
9	.43	.78	.87	1.03	1.28	1.53	1.82	2.12
10	.45	.83	.93	1.10	1.38	1.66	1.98	2.31
11	.47	.88	1.00	1.18	1.48	1.78	2.14	2.48
12	.49	.93	1.06	1.26	1.58	1.90	2.29	2.66
13	.51	.98	1.12	1.33	1.69	2.02	2.44	2.83
14	.53	1.03	1.18	1.41	1.79	2.14	2.60	3.01
15	.55	1.08	1.24	1.48	1.89	2.25	2.75	3.18
16	.57	1.13	1.30	1.56	1.99	2.37	2.90	3.36
17	.59	1.18	1.36	1.64	2.09	2.49	3.06	3.53
18	.61	1.23	1.42	1.71	2.20	2.61	3.21	3.71
19	.63	1.28	1.48	1.79	2.30	2.73	3.36	3.88
20	.65	1.32	1.54	1.86	2.40	2.85	3.51	4.06
21	.67	1.36	1.59	1.93	2.48	2.96	3.65	4.23
22	.69	1.40	1.64	1.99	2.57	3.07	3.79	4.40
23	.71	1.44	1.69	2.06	2.65	3.18	3.93	4.57
24	.73	1.48	1.73	2.12	2.74	3.29	4.07	4.74
25	.75	1.52	1.78	2.18	2.82	3.40	4.21	4.91
30	.84	1.71	2.01	2.50	3.25	3.95	4.91	5.76
35	.94	1.91	2.25	2.82	3.67	4.50	5.61	6.61
40	1.03	2.10	2.48	3.14	4.10	5.05	6.31	7.46
45	1.13	2.30	2.72	3.46	4.52	5.60	7.01	8.26
50	1.22	2.49	2.95	3.78	4.95	6.15	7.71	9.06
55	1.32	2.65	3.19	4.08	5.35	6.70	8.36	9.86
60	1.41	2.81	3.42	4.38	5.75	7.25	9.01	10.66
65	1.51	2.97	3.66	4.68	6.15	7.80	9.66	11.46
70	1.60	3.13	3.89	4.98	6.55	8.35	10.31	12.26

WEIGHT OF PLANTS:

25 plants, 1 lb. 100 plants, 4 lbs.
500 plants, 20 lbs. 1000 plants, 40 lbs.



JERSEYBELLE

Big and Beautiful

1885

"OUR
80th
YEAR"

1965

W.F. ALLEN CO.

SALISBURY, MARYLAND

CATSKILL

King of the Midseason Varieties